

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE** **10/591419**

Application Number : *Unassigned* Confirmation No.: *Unassigned*  
Applicant : FROHBERG *et al.*  
Filed : September 1, 2006  
Title : METHODS FOR IDENTIFYING PROTEINS WITH STARCH  
PHOSPHORYLATING ENZYMATIC ACTIVITY  
TC/Art Unit : *Unassigned*  
Examiner: : *Unassigned*  
Docket No. : 65084.000020  
Customer No. : **21967**

**MAIL STOP AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with 37 C.F.R. §§ 1.97 and 1.98, and in compliance with the duty of disclosure set forth in 37 C.F.R. § 1.56, Applicants submit herewith copies of the references listed on the attached Form PTO-SB/08A (modified) for consideration and to be made of record herein by the U.S. Patent and Trademark Office in the above-captioned application.

This Information Disclosure Statement (IDS) is not to be construed as a representation that a search has, or has not, been conducted or that no better art exists. The filing of this IDS is not to be construed as admission that the information cited in the IDS is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

Consideration of the foregoing plus the prompt return of a copy of the enclosed Form SB/08A with the Examiner's initials in the left column in accordance with MPEP § 609 are respectfully requested.

In accordance with 37 C.F.R. § 1.97(b), this Information Disclosure Statement is believed to be submitted within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d); therefore, it is respectfully submitted that no fee is required for consideration of this information.

IAP5 Rec'd PCT/PTO 01 SEP 2006

In the event that additional fees are deemed necessary, or in the event of any variance between the amount enclosed and the fees determined by the U.S. Patent and Trademark Office, please charge or credit any such variance to the undersigned's Deposit Account No. 50-0206.

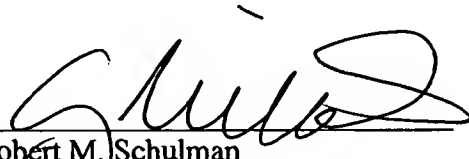
10/591419

Respectfully submitted,

HUNTON &amp; WILLIAMS LLP

Dated: September 1, 2006

By:

  
Robert M. Schulman  
Registration No. 31,196Christopher J. Nichols, Ph.D.  
Registration No. 55,984

Hunton & Williams LLP  
Intellectual Property Department  
1900 K Street, N.W. Suite 1200  
Washington, DC 20006  
(202) 955-1500 (telephone)  
(202) 778-2201 (facsimile)

RMS/CJN:cdh

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Application Number	Unassigned <b>10/591419</b>
Filing Date	September 1, 2006
First Named Inventor	Claus FROHBURG
Art Unit	Unassigned
Examiner Name	Unassigned

Sheet	1	of	2	Attorney Docket Number	65084.000020
-------	---	----	---	------------------------	--------------

**U.S. PATENT DOCUMENTS**

*Examiner Initials	Cite No.	DOCUMENT NUMBER Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	US-			

**FOREIGN PATENT DOCUMENTS**

*Examiner Initial	Cite No.	FOREIGN PATENT DOCUMENT		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	TRANSLATION	
		Country Code:	Number - Kind Code (if known)				YES	NO
/BP/	2.	WO	2005/095632	10-13-2005	FROHBURG		<input type="checkbox"/>	<input type="checkbox"/>
	3.	WO					<input type="checkbox"/>	<input type="checkbox"/>

**OTHER DOCUMENTS - NON-PATENT LITERATURE DOCUMENTS**

*Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	TRANSLATION	
			YES	NO
/BP/	4.	Blennow et al. (2000) "The distribution of covalently bound phosphate in the starch granule in relation to starch crystallinity." <u>International Journal of Biological Macromolecules</u> 27: 211-218	<input type="checkbox"/>	<input type="checkbox"/>
↓	5.	Blennow et al. (2000) "Starch molecular structure and phosphorylation investigated by a combined chromatographic and chemometric approach." <u>Carbohydrate Polymers</u> 41: 163-174	<input type="checkbox"/>	<input type="checkbox"/>
↓	6.	Jane et al. (November/December 1996) "Phosphorus in Rice and Other Starches." <u>Cereal Foods World</u> 41(11): 827-832	<input type="checkbox"/>	<input type="checkbox"/>
↓	7.	Kötting et al. (January 2005) "Identification of a Novel Enzyme Required for Starch Metabolism in Arabidopsis Leaves. The Phosphoglucan, Water Dikinase <sup>[w]</sup> ." <u>Plant Physiology</u> 137: 242-252	<input type="checkbox"/>	<input type="checkbox"/>
↓	8.	Lorberth et al. (May 1998) "Inhibition of a starch-granule-bound protein leads to modified starch and repression of cold sweetening." <u>Nature Biotechnology</u> 16: 473-477	<input type="checkbox"/>	<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute for form 1449A/PTO				Application Number		Unassigned	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				Filing Date		September 11, 2006 <b>10/591419</b>	
				First Named Inventor		Claus FROHBERG	
				Art Unit		Unassigned	
				Examiner Name		Unassigned	
Sheet	2	of	2	Attorney Docket Number		65084.000020	
<b>OTHER DOCUMENTS - NON-PATENT LITERATURE DOCUMENTS</b>							
*Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	TRANSLATION				
			YES	NO			
/BP/	9.	Mikkelsen et al. (2004) "Functional characterization of $\alpha$ -glucan, water dikinase, the starch phosphorylating enzyme." <u>Biochem. J.</u> 377: 525-532	<input type="checkbox"/>	<input type="checkbox"/>			
↓	10.	Ritte et al. (2003) "Determination of the starch-phosphorylating enzyme activity in plant extracts." <u>Planta</u> 216(5): 798-801	<input type="checkbox"/>	<input type="checkbox"/>			
	11.	Ritte et al. (May 14, 2002) "The starch-related R1 protein is an $\alpha$ -glucan, water dikinase." <u>PNAS</u> 99(10): 7166-7171	<input type="checkbox"/>	<input type="checkbox"/>			
	12.	Tabata et al. (1971) "Studies on Starch Posphate." <u>Starch/Stärke</u> 23: 267-272	<input type="checkbox"/>	<input type="checkbox"/>			
	13.		<input type="checkbox"/>	<input type="checkbox"/>			
	14.		<input type="checkbox"/>	<input type="checkbox"/>			
	15.		<input type="checkbox"/>	<input type="checkbox"/>			
	16.		<input type="checkbox"/>	<input type="checkbox"/>			
EXAMINER SIGNATURE /Brent Page/				DATE CONSIDERED 12/30/2010			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							